

bottom end of said tube being fixedly attached to said disk such that rotational axes of said disk and said tube are substantially aligned and are substantially perpendicular to said substantially flat bottom of said disk;

at least one bar fixedly attached to or integrally molded with the top of said disk on the annular area of the top of said disk outside the perimeter of said tube, said bar aligned substantially radially from the rotational axis of said disk; and

a magnet disposed within said disk.

8. An apparatus as recited in claim 1 wherein said screw thread has a thread depth at least equal to a radius of said outside surface of said tube, and further comprising:

a base comprising;

a disk having a top surface and a substantially flat bottom surface, said top surface having an area greater than an area of a bottom end of said tube, said bottom end of said tube being integrally molded with said disk such that rotational axes of said disk and said tube are substantially aligned and are substantially perpendicular to a substantially flat bottom of said disk;

at least one bar fixedly attached to or integrally molded with the top of said disk on the annular area of the top of said disk outside of the perimeter of said tube, said bar aligned substantially radially from the rotational axis of said disk; and

a magnet disposed within said disk;

a mixing vessel capable of containing said tube and said base; and

a magnetic motor disposed beneath said mixing vessel and coupled by magnetic flux with said magnet disposed within said disk.

9. An apparatus as recited in claim 1 wherein said aperture is located centrally between two flanking surfaces of said screw thread.

10. An apparatus as recited in claim 1 wherein said aperture is a circular bore.

11. An apparatus as recited in claim 1 wherein the height of said external screw thread, measured from a crest of said external screw thread to a lowest adjacent point between flanking surfaces of said screw thread is at least equal to a radius of said tube measured from a longitudinal axis of said tube to said exterior axial surface of said tube at said lowest point between flanking surfaces of said screw thread.

12. An apparatus for mixing liquid and for entrainment mixing of vapors in liquid comprising:

a tube having an open top end and a longitudinal bore extending into said tube from the open top end to a closed bottom end, said closed bottom end forming a floor within said longitudinal bore, said tube also having an exterior bottom end, said tube further having an exterior axial surface between an open top end and an exterior bottom end, said exterior axial surface having at least one helix in the form of an external screw thread, said tube also having a sidewall between said exterior axial surface and said longitudinal bore, said sidewall also defining at least one aperture through said sidewall for circulation of vapor;

a base comprising;

a disk having a top surface and a substantially flat bottom surface, said top surface having an area greater than an area of a bottom end of said tube, said bottom end of said tube being fixedly attached to said disk such that the rotational axes of said disk and said tube are substantially aligned and are substantially perpendicular to a substantially flat bottom end of said disk;

at least one bar fixedly attached to or integrally molded with said top of said disk on an annular area of said top end of said disk outside of a perimeter of said tube, said bar aligned substantially radially from said rotational axis of said disk; and

a magnet disposed with said disk.

13. An apparatus as recited in claim 12 wherein said aperture is a circular bore.

14. An apparatus as recited in claim 13 wherein said circular bore is located substantially tangential to said floor.

15. An apparatus as recited in claim 13 wherein said circular bore is located substantially tangential to said floor and is located centrally in a root of said external screw thread.

16. An apparatus as recited in claim 12 further comprising:

a mixing vessel capable of containing said tube and said base; and

a magnetic motor disposed beneath said mixing vessel and coupled by magnetic flux with said magnet.

17. A method for entraining vapor in liquids comprising:

placing a tube in a container, said tube having an open top end and a longitudinal bore extending into said tube from said open top end to a closed bottom end, said closed bottom end forming a floor within said longitudinal bore, said tube also having an exterior bottom end, said tube further having an exterior axial surface between said open top end and said exterior bottom end, said exterior axial surface having at least one helix in the form of an external screw thread, said tube also having a sidewall between said exterior axial surface and said longitudinal bore, said sidewall also defining at least one aperture for circulation of vapor;

providing liquid in said container;

providing vapor in said container;

rotating said tube to a speed sufficient to cause said liquid to be urged away from said tube, forming a vortex, such that a lowest point on a surface of said vortex is substantially level with said aperture, whereby said liquid is robustly mixed with said vapor in an area adjacent to said aperture, said vapor being drawn through said aperture, and said vapor being entrained into said liquid.

18. A method for entraining vapor in liquids as recited in claim 17 further comprising:

providing a disk having a top surface and a substantially flat bottom surface, said top surface having an area greater than an area of a bottom end of said tube, said bottom end of said tube being fixedly attached to said top surface of said disk such that rotational axes of said disk and said tube are substantially aligned and are substantially perpendicular to said substantially flat bottom of said disk;

providing at least one bar fixedly attached to said top of said disk on an annular area of said top of said disk outside a perimeter of said tube, said bar aligned substantially radially from said rotational axis of said disk; and

providing a magnet disposed within said disk.

19. A method for entraining vapor in liquids as recited in claim 18 further comprising:

providing a magnetic motor disposed beneath said mixing vessel and coupled by magnetic flux with said magnet; energizing said magnetic motor such that said tube and said base are rotated and said liquid is urged away from